

# SEQUENZPROTOKOLL

<110> Bayer Aktiengesellschaft

<120> GABA-B-Rezeptoren

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<150> DE 199 55 408.0

<151> 1999-11-18

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<170> PatentIn Ver. 2.1

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Arg Pro Asp Glu Leu His Ile Gly Gly Ile Phe Pro Ile Ala Gly Lys	
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Gly Gly Trp Gln Gly Gly Gln Ala Cys Met Pro Ala Thr Arg Leu Ala	
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Leu Asp Asp Val Asn Lys Gln Pro Asn Leu Leu Pro Gly Phe Lys Leu	
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Ile Leu His Ser Asn Asp Ser Glu Cys Glu Pro Gly Leu Gly Ala Ser	
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Val Met Tyr Asn Leu Leu Tyr Asn Lys Pro Gln Lys Leu Met Leu Leu	
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00715962-14700

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00715962-11700

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Cys	Phe	Leu	Ser	Met	Leu	Leu	Ile	Phe	Val	Pro	Lys	Val	Ile	Glu	Val	
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Ile Leu His Ser Asn Asp Ser Glu Cys Glu Pro Gly Leu Gly Ala Ser  
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00715962-11700

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002777-29657260

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 Gln Leu Ser Tyr Ala Asp Thr His Pro Met Phe Thr Lys Asp Ala Phe  
 130 135 140  
 ccg aat ttc ttt cgc gtg gta ccc tcg gag aat gcc ttt aat gcg ccg 480  
 Pro Asn Phe Phe Arg Val Val Pro Ser Glu Asn Ala Phe Asn Ala Pro



09745962-11700

145	150	155	160	
cga ctg gcc ttg	ctg aag gag ttc	aat tgg acc aga	gtg ggc act gtc	528
Arg Leu Ala Leu	Leu Lys Glu Phe	Asn Trp Thr Arg	Val Gly Thr Val	
	165	170	175	
tac cag aat gag	cca cgc tat tgc	ctg ccc cac aat	cac atg gtg gct	576
Tyr Gln Asn Glu	Pro Arg Tyr Ser	Leu Pro His Asn	His Met Val Ala	
	180	185	190	
gac ctg gat gcc	atg gag gtc gag	gtg gtg gaa acg	cag agc ttc gtc	624
Asp Leu Asp Ala	Met Glu Val Glu	Val Val Glu Thr	Gln Ser Phe Val	
	195	200	205	
aac gat gtg gct	gaa tca ttg aag	aaa ctg cgc gag	aag gac gtg agg	672
Asn Asp Val Ala	Glu Ser Leu Lys	Lys Leu Arg Glu	Lys Asp Val Arg	
	210	215	220	
atc att ctg ggc	aac ttt aac gag	cac ttt gca cgc	aag gca ttc tgt	720
Ile Ile Leu Gly	Asn Phe Asn Glu	His Phe Ala Arg	Lys Ala Phe Cys	
	225	230	235	240
gag gct tat aaa	ttg gat atg tat	ggc aga gcc tat	caa tgg ctg atc	768
Glu Ala Tyr Lys	Leu Asp Met Tyr	Gly Arg Ala Tyr	Gln Trp Leu Ile	
	245	250	255	
atg gct acc tat	tcc acg gat tgg	tgg aat gtc acg	cag gac agc gag	816
Met Ala Thr Tyr	Ser Thr Asp Trp	Trp Asn Val Thr	Gln Asp Ser Glu	
	260	265	270	
tgc agt gtg gag	gag atc gct aca	gcc ttg gaa ggt	gcc att cta gtg	864
Cys Ser Val Glu	Glu Ile Ala Thr	Ala Leu Glu Gly	Ala Ile Leu Val	
	275	280	285	
gat ctt ttg ccc	ttg tcc acc agt	ggg gac atc aca	gtg gct ggc att	912
Asp Leu Leu Pro	Leu Ser Thr Ser	Gly Asp Ile Thr	Val Ala Gly Ile	
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act gct gat gag	tat ctt gtg gag	tac gac aga ctg	cga ggc act gaa	960
Thr Ala Asp Glu	Tyr Leu Val Glu	Tyr Asp Arg Leu	Arg Gly Thr Glu	
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tat tcc cgc ttt	cat ggc tat acc	tac gat ggt atc	tgg gca gct gcc	1008
Tyr Ser Arg Phe	His Gly Tyr Thr	Tyr Asp Gly Ile	Trp Ala Ala Ala	
	325	330	335	
ctg gcc att cag	tat gtg gcc gaa	aag cga gag gat	ctg cta aca cat	1056
Leu Ala Ile Gln	Tyr Val Ala Glu	Lys Arg Glu Asp	Leu Leu Thr His	
	340	345	350	
ttt gat tat cgc	gtg aag gac tgg	gag agt gtc ttc	ctt gag gct cta	1104
Phe Asp Tyr Arg	Val Lys Asp Trp	Glu Ser Val Phe	Leu Glu Ala Leu	
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cgt aat aca tcc	ttc gag ggt gtg	acg gga ccc gtg	cgt ttc tac aac	1152
Arg Asn Thr Ser	Phe Glu Gly Val	Thr Gly Pro Val	Arg Phe Tyr Asn	
	370	375	380	

aac gag cgc aag gcc aac atc ctg atc aat cag ttt cag ctg gga caa	1200
Asn Glu Arg Lys Ala Asn Ile Leu Ile Asn Gln Phe Gln Leu Gly Gln	
385 390 395 400	
atg gaa aag atc ggg gaa tac cac tca cag aag tca cac ttg gat tta	1248
Met Glu Lys Ile Gly Glu Tyr His Ser Gln Lys Ser His Leu Asp Leu	
405 410 415	
agc ttg gga aaa cca gtc aaa tgg gtg ggg aaa act cct ccc aag gat	1296
Ser Leu Gly Lys Pro Val Lys Trp Val Gly Lys Thr Pro Pro Lys Asp	
420 425 430	
cgc act ttg atc tac atc gag cac agt cag gtc aat cca acc ata tat	1344
Arg Thr Leu Ile Tyr Ile Glu His Ser Gln Val Asn Pro Thr Ile Tyr	
435 440 445	
att gta tcg gct agt gct tcg gtc att gga gtg att att gcc aca gtt	1392
Ile Val Ser Ala Ser Ala Ser Val Ile Gly Val Ile Ile Ala Thr Val	
450 455 460	
ttt ctg gcc ttt aac att aag tat cgc aat caa aga tac atc aag atg	1440
Phe Leu Ala Phe Asn Ile Lys Tyr Arg Asn Gln Arg Tyr Ile Lys Met	
465 470 475 480	
tcc agt ccc cat ttg aac aat ctg atc att gtg ggc tgt atg att acc	1488
Ser Ser Pro His Leu Asn Asn Leu Ile Ile Val Gly Cys Met Ile Thr	
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tat ttg agc atc att ttc ctg ggt ctc gat acc aca tta agt agt gtg	1536
Tyr Leu Ser Ile Ile Phe Leu Gly Leu Asp Thr Thr Leu Ser Ser Val	
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Ala Ala Phe Pro Tyr Ile Cys Thr Ala Arg Ala Trp Ile Leu Met Ala	
515 520 525	
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Gly Phe Ser Leu Ser Phe Gly Ala Met Phe Ser Lys Thr Trp Arg Val	
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cat tcg ata ttc acc gat ctg aag ctc aat aag aag gtg atc aag gac	1680
His Ser Ile Phe Thr Asp Leu Lys Leu Asn Lys Lys Val Ile Lys Asp	
545 550 555 560	
tat caa ttg ttt atg gtt gtg ggc gtg ctt ttg gcc att gat ata gcc	1728
Tyr Gln Leu Phe Met Val Val Gly Val Leu Leu Ala Ile Asp Ile Ala	
565 570 575	
att ata acc acc tgg cag att gcc gat ccc ttt tac cgc gaa act aaa	1776
Ile Ile Thr Thr Trp Gln Ile Ala Asp Pro Phe Tyr Arg Glu Thr Lys	
580 585 590	
cag ttg gaa ccc ttg cat cac gag aat att gat gat gtc ttg gtg atc	1824
Gln Leu Glu Pro Leu His His Glu Asn Ile Asp Asp Val Leu Val Ile	
595 600 605	

ccc gaa aac gag tac tgc cag tct gag cac atg acc ata ttc gtt agc	1872
Pro Glu Asn Glu Tyr Cys Gln Ser Glu His Met Thr Ile Phe Val Ser	
610 615 620	
att att tat gcc tac aag gga ctg ttg ttg gtt ttt ggc gcc ttt ttg	1920
Ile Ile Tyr Ala Tyr Lys Gly Leu Leu Leu Val Phe Gly Ala Phe Leu	
625 630 635 640	
gcc tgg gaa act cga cat gtt tct ata ccg gct ctg aac gat tcc aag	1968
Ala Trp Glu Thr Arg His Val Ser Ile Pro Ala Leu Asn Asp Ser Lys	
645 650 655	
cat att ggt ttc tcc gtt tat aac gtg ttc atc act tgt ctg gcc gga	2016
His Ile Gly Phe Ser Val Tyr Asn Val Phe Ile Thr Cys Leu Ala Gly	
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gcg gct ata tcc ctg gtg cta tcg gat cga aag gat tta gtt ttt gtc	2064
Ala Ala Ile Ser Leu Val Leu Ser Asp Arg Lys Asp Leu Val Phe Val	
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Leu Leu Ser Phe Phe Ile Ile Phe Cys Thr Thr Ala Thr Leu Cys Leu	
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Val Phe Val Pro Lys Leu Val Glu Leu Lys Arg Asn Pro Gln Gly Val	
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Val Asp Lys Arg Val Arg Ala Thr Leu Arg Pro Met Ser Lys Asn Gly	
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Arg Arg Asp Ser Ser Val Cys Glu Leu Glu Gln Arg Leu Arg Asp Val	
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Lys Asn Thr Asn Cys Arg Phe Arg Lys Ala Leu Met Glu Lys Glu Asn	
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Ile Asp Gly Val Thr Cys Thr Gly Gly Ser Asn Val Gly Ser Glu Leu	
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Glu Pro Ile Leu Asn Asp Asp Ile Val Arg Leu Ser Ala Pro Pro Val	
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Arg Arg Glu Met Pro Ser Thr Thr Val Thr Glu Met Thr Ser Val Asp	
820 825 830	
agt gtg acc tcg act cat gtg gag atg gat aac tcc ttt gtg tcg gtg	2544

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cag	tct	aca	gtg	atg	gcg	cca	tcg	ctt	cct	ccc	aaa	aag	aaa	aag	caa	2592	
Gln	Ser	Thr	Val	Met	Ala	Pro	Ser	Leu	Pro	Pro	Lys	Lys	Lys	Lys	Gln		
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Ser	Ile	Val	Glu	His	His	Ser	His	Ala	Pro	Ala	Pro	Thr	Met	Met	Gln		
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Pro	Ile	Gln	Gln	Gln	Leu	Gln	Gln	His	Leu	Gln	Gln	His	Gln	Gln	Met		
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Gln	Gln	Gln	His	Leu	Gln	Gln	Gln	Gln	His	Gln	Gln	Met	Gln	Gln	Gln		
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Gln	Gln	Gln	Gln	Gln	His	His	His	Arg	His	Leu	Glu	Lys	Arg	Asn	Ser		
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gtg	tcc	gct	cag	acc	gat	gat	aat	ata	ggc	agc	atc	acc	agt	acg	gcg	2832	
Val	Ser	Ala	Gln	Thr	Asp	Asp	Asn	Ile	Gly	Ser	Ile	Thr	Ser	Thr	Ala		
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ggc	aag	cgg	agc	gga	gga	gac	tgc	tcc	agc	atg	cgg	gag	agg	cgt	caa	2880	
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tcg	acc	gcc	tcc	agg	cac	tac	gac	agt	ggc	agc	cag	acg	ccc	acc	gcc	2928	
Ser	Thr	Ala	Ser	Arg	His	Tyr	Asp	Ser	Gly	Ser	Gln	Thr	Pro	Thr	Ala		
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cgg	cca	aag	tac	agc	agc	tcg	cac	cgg	aac	tcc	tcc	acc	aac	atc	tcc	2976	
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Thr	Pro	Ala	Val	Ile	Lys	Thr	Pro	Thr	Ala	Ser	Asp	His	Arg	Arg	Thr		
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ctc	tgg	gac	acg	cac	acg	ctg	tcg	cac	gcc	aag	cag	cgc	cag	tcg	ccg	3168	
Leu	Trp	Asp	Thr	His	Thr	Leu	Ser	His	Ala	Lys	Gln	Arg	Gln	Ser	Pro		
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cgg	aac	tac	gcc	agt	ccg	cag	cgc	tgt	gcg	gaa	cat	cat	ggc	ggc	cac	3216	
Arg	Asn	Tyr	Ala	Ser	Pro	Gln	Arg	Cys	Ala	Glu	His	His	Gly	Gly	His		

09715952-11700

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Gly Met Thr Tyr Asp Pro Asn Thr Thr Ser Pro Ile Gln Arg Ser Val			
1075	1080	1085	
tcc gag aag aac cgc aac aaa cat cgg cca aaa ccg caa aag ggc acc			3312
Ser Glu Lys Asn Arg Asn Lys His Arg Pro Lys Pro Gln Lys Gly Thr			
1090	1095	1100	
gtt tgc cag agc gag acg gac agc gaa cgg gaa cga gat ccg ccg ccc			3360
Val Cys Gln Ser Glu Thr Asp Ser Glu Arg Glu Arg Asp Pro Pro Pro			
1105	1110	1115	1120
aac agt cag ccg tgc gtc cag ccg cgt aag gtc agc ccg agc tct aac			3408
Asn Ser Gln Pro Cys Val Gln Pro Arg Lys Val Ser Arg Ser Ser Asn			
1125	1130	1135	
atc cag cac gcc gcc cac cac cac agt tcg ccc aat gtg gcg ccc gat			3456
Ile Gln His Ala Ala His His His Ser Ser Pro Asn Val Ala Pro Asp			
1140	1145	1150	
aag cag cgg agc agg cag cgc ggc aag cag gat agc agc atc tac ggc			3504
Lys Gln Arg Ser Arg Gln Arg Gly Lys Gln Asp Ser Ser Ile Tyr Gly			
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gcc agc agc gag acg gaa ctg ctc gag ggc gag acg gca att ttg ccc			3552
Ala Ser Ser Glu Thr Glu Leu Leu Glu Gly Glu Thr Ala Ile Leu Pro			
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atc ttc cgg aaa ctc ctc acc gag aag agt ccc aac tat cgg ggc cgc			3600
Ile Phe Arg Lys Leu Leu Thr Glu Lys Ser Pro Asn Tyr Arg Gly Arg			
1185	1190	1195	1200
agt gcc gtg ggc cag agc tgt ccg aat ata tcc atc aaa tgc gat atc			3648
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Ile Ala Gly Phe Phe Pro Tyr Gly Asp Gly Val Glu Asn Ser Tyr Thr			
35	40	45	

09715962 " 111700

Gly	Arg	Gly	Val	Met	Pro	Ser	Val	Lys	Leu	Ala	Leu	Gly	His	Val	Asn	50	55	60
Glu	His	Gly	Lys	Ile	Leu	Ala	Asn	Tyr	Arg	Leu	His	Met	Trp	Trp	Asn	65	70	75
Asp	Thr	Gln	Cys	Asn	Ala	Ala	Val	Gly	Val	Lys	Ser	Phe	Phe	Asp	Met	85	90	95
Met	His	Ser	Gly	Pro	Asn	Lys	Val	Met	Leu	Phe	Gly	Ala	Ala	Cys	Thr	100	105	110
His	Val	Thr	Asp	Pro	Ile	Ala	Lys	Ala	Ser	Lys	His	Trp	His	Leu	Thr	115	120	125
Gln	Leu	Ser	Tyr	Ala	Asp	Thr	His	Pro	Met	Phe	Thr	Lys	Asp	Ala	Phe	130	135	140
Pro	Asn	Phe	Phe	Arg	Val	Val	Pro	Ser	Glu	Asn	Ala	Phe	Asn	Ala	Pro	145	150	155
Arg	Leu	Ala	Leu	Leu	Lys	Glu	Phe	Asn	Trp	Thr	Arg	Val	Gly	Thr	Val	165	170	175
Tyr	Gln	Asn	Glu	Pro	Arg	Tyr	Ser	Leu	Pro	His	Asn	His	Met	Val	Ala	180	185	190
Asp	Leu	Asp	Ala	Met	Glu	Val	Glu	Val	Val	Glu	Thr	Gln	Ser	Phe	Val	195	200	205
Asn	Asp	Val	Ala	Glu	Ser	Leu	Lys	Lys	Leu	Arg	Glu	Lys	Asp	Val	Arg	210	215	220
Ile	Ile	Leu	Gly	Asn	Phe	Asn	Glu	His	Phe	Ala	Arg	Lys	Ala	Phe	Cys	225	230	235
Glu	Ala	Tyr	Lys	Leu	Asp	Met	Tyr	Gly	Arg	Ala	Tyr	Gln	Trp	Leu	Ile	245	250	255
Met	Ala	Thr	Tyr	Ser	Thr	Asp	Trp	Trp	Asn	Val	Thr	Gln	Asp	Ser	Glu	260	265	270
Cys	Ser	Val	Glu	Glu	Ile	Ala	Thr	Ala	Leu	Glu	Gly	Ala	Ile	Leu	Val	275	280	285
Asp	Leu	Leu	Pro	Leu	Ser	Thr	Ser	Gly	Asp	Ile	Thr	Val	Ala	Gly	Ile	290	295	300
Thr	Ala	Asp	Glu	Tyr	Leu	Val	Glu	Tyr	Asp	Arg	Leu	Arg	Gly	Thr	Glu	305	310	315
Tyr	Ser	Arg	Phe	His	Gly	Tyr	Thr	Tyr	Asp	Gly	Ile	Trp	Ala	Ala	Ala	325	330	335
Leu	Ala	Ile	Gln	Tyr	Val	Ala	Glu	Lys	Arg	Glu	Asp	Leu	Leu	Thr	His	340	345	350

09715962-11700

Phe	Asp	Tyr	Arg	Val	Lys	Asp	Trp	Glu	Ser	Val	Phe	Leu	Glu	Ala	Leu	355	360	365	
Arg	Asn	Thr	Ser	Phe	Glu	Gly	Val	Thr	Gly	Pro	Val	Arg	Phe	Tyr	Asn	370	375	380	
Asn	Glu	Arg	Lys	Ala	Asn	Ile	Leu	Ile	Asn	Gln	Phe	Gln	Leu	Gly	Gln	385	390	395	400
Met	Glu	Lys	Ile	Gly	Glu	Tyr	His	Ser	Gln	Lys	Ser	His	Leu	Asp	Leu	405	410	415	
Ser	Leu	Gly	Lys	Pro	Val	Lys	Trp	Val	Gly	Lys	Thr	Pro	Pro	Lys	Asp	420	425	430	
Arg	Thr	Leu	Ile	Tyr	Ile	Glu	His	Ser	Gln	Val	Asn	Pro	Thr	Ile	Tyr	435	440	445	
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Phe	Leu	Ala	Phe	Asn	Ile	Lys	Tyr	Arg	Asn	Gln	Arg	Tyr	Ile	Lys	Met	465	470	475	480
Ser	Ser	Pro	His	Leu	Asn	Asn	Leu	Ile	Ile	Val	Gly	Cys	Met	Ile	Thr	485	490	495	
Tyr	Leu	Ser	Ile	Ile	Phe	Leu	Gly	Leu	Asp	Thr	Thr	Leu	Ser	Ser	Val	500	505	510	
Ala	Ala	Phe	Pro	Tyr	Ile	Cys	Thr	Ala	Arg	Ala	Trp	Ile	Leu	Met	Ala	515	520	525	
Gly	Phe	Ser	Leu	Ser	Phe	Gly	Ala	Met	Phe	Ser	Lys	Thr	Trp	Arg	Val	530	535	540	
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Tyr	Gln	Leu	Phe	Met	Val	Val	Gly	Val	Leu	Leu	Ala	Ile	Asp	Ile	Ala	565	570	575	
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Gln	Leu	Glu	Pro	Leu	His	His	Glu	Asn	Ile	Asp	Asp	Val	Leu	Val	Ile	595	600	605	
Pro	Glu	Asn	Glu	Tyr	Cys	Gln	Ser	Glu	His	Met	Thr	Ile	Phe	Val	Ser	610	615	620	
Ile	Ile	Tyr	Ala	Tyr	Lys	Gly	Leu	Leu	Leu	Val	Phe	Gly	Ala	Phe	Leu	625	630	635	640
Ala	Trp	Glu	Thr	Arg	His	Val	Ser	Ile	Pro	Ala	Leu	Asn	Asp	Ser	Lys	645	650	655	





Ser Thr Ala Ser Arg His Tyr Asp Ser Gly Ser Gln Thr Pro Thr Ala  
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Arg Pro Lys Tyr Ser Ser Ser His Arg Asn Ser Ser Thr Asn Ile Ser  
980 985 990

Thr Ser Gln Ser Glu Leu Ser Asn Met Cys Pro His Ser Lys Pro Ser  
995 1000 1005

Thr Pro Ala Val Ile Lys Thr Pro Thr Ala Ser Asp His Arg Arg Thr  
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Leu Trp Asp Thr His Thr Leu Ser His Ala Lys Gln Arg Gln Ser Pro  
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Arg Asn Tyr Ala Ser Pro Gln Arg Cys Ala Glu His His Gly Gly His  
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Ile Phe Arg Lys Leu Leu Thr Glu Lys Ser Pro Asn Tyr Arg Gly Arg  
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Ala	Ala	Ala	Met	Glu	Ser	Ser	Ala	Glu	Leu	Gln	Ala	Leu	Gly	His	Glu	
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Ser	Pro	Pro	Gly	Glu	Ser	Ala	Ser	Thr	Val	Thr	Ala	Gly	Gly	Thr	Pro	
65					70				75						80	
att	cca	ccg	cgc	tcc	gat	tgg	aag	tac	aaa	cgg	acg	aaa	gtc	aaa	cgc	288
Ile	Pro	Pro	Arg	Ser	Asp	Trp	Lys	Tyr	Lys	Arg	Thr	Lys	Val	Lys	Arg	
				85				90					95			
cgg	cag	cag	cgc	ctc	aat	tcg	cac	agc	aat	ctg	ccc	gga	agc	acc	aat	336
Arg	Gln	Gln	Arg	Leu	Asn	Ser	His	Ser	Asn	Leu	Pro	Gly	Ser	Thr	Asn	
			100					105				110				
gcc	tcc	cac	gct	cac	cac	ctc	ctc	aat	ctg	ccc	ccc	agg	cag	cga	tac	384
Ala	Ser	His	Ala	His	His	Leu	Leu	Asn	Leu	Pro	Pro	Arg	Gln	Arg	Tyr	
			115				120					125				
ttg	aag	gtc	aac	cag	gtg	ttc	gaa	agc	gaa	cgc	cgc	atg	tcg	ccg	gcc	432
Leu	Lys	Val	Asn	Gln	Val	Phe	Glu	Ser	Glu	Arg	Arg	Met	Ser	Pro	Ala	
	130					135					140					
gaa	atg	cag	cgc	aat	cat	ggc	aaa	atc	gtg	ctg	ctc	gga	ctc	ttt	gag	480
Glu	Met	Gln	Arg	Asn	His	Gly	Lys	Ile	Val	Leu	Leu	Gly	Leu	Phe	Glu	
145					150				155					160		
ctg	tcc	aca	tcg	cgg	gga	cca	cgt	ccg	gat	ggt	ctg	agc	gaa	ttg	gga	528
Leu	Ser	Thr	Ser	Arg	Gly	Pro	Arg	Pro	Asp	Gly	Leu	Ser	Glu	Leu	Gly	
				165				170					175			
gct	gcc	acc	atg	gcc	gtg	gaa	cac	atc	aac	cgc	aag	cgc	ctg	ctg	ccg	576
Ala	Ala	Thr	Met	Ala	Val	Glu	His	Ile	Asn	Arg	Lys	Arg	Leu	Leu	Pro	
			180					185					190			
ggc	tac	acc	ctc	gag	ctc	gtg	acc	aac	gat	act	cag	tgt	gat	cct	gga	624
Gly	Tyr	Thr	Leu	Glu	Leu	Val	Thr	Asn	Asp	Thr	Gln	Cys	Asp	Pro	Gly	

09715962-11700

195	200	205	
gtg ggc gtg gat cgc ttc ttc cac gcc atc tac aca cag ccc tcg acg Val Gly Val Asp Arg Phe Phe His Ala Ile Tyr Thr Gln Pro Ser Thr 210 215 220			672
agg atg gtg atg ctg ctg gga tcg gcc tgc tcg gag gtc acc gag agc Arg Met Val Met Leu Leu Gly Ser Ala Cys Ser Glu Val Thr Glu Ser 225 230 235 240			720
ctg gcg aag gtg gtg ccc tac tgg aac atc gtg cag gta tcc ttc ggt Leu Ala Lys Val Val Pro Tyr Trp Asn Ile Val Gln Val Ser Phe Gly 245 250 255			768
tcc aca tcg ccg gcg ttg agc gac agg cgg gag ttc ccc tac ttc tac Ser Thr Ser Pro Ala Leu Ser Asp Arg Glu Phe Pro Tyr Phe Tyr 260 265 270			816
agg aca gtg gcc ccg gac tcc tca cac aat ccg gcg cgc atc gct ttc Arg Thr Val Ala Pro Asp Ser Ser His Asn Pro Ala Arg Ile Ala Phe 275 280 285			864
att cgg aag ttt ggc tgg ggc acg gtg acc act ttc tcg cag aac gag Ile Arg Lys Phe Gly Trp Gly Thr Val Thr Thr Phe Ser Gln Asn Glu 290 295 300			912
gag gtt cac tcg ctg gcg gtg aac aac ctg gtc acc gaa ctg gag gcg Glu Val His Ser Leu Ala Val Asn Asn Leu Val Thr Glu Leu Glu Ala 305 310 315 320			960
gcc aac ata tcc tgt gcc gcc acc atc acc ttt gcg gcc acc gac ttc Ala Asn Ile Ser Cys Ala Ala Thr Ile Thr Phe Ala Ala Thr Asp Phe 325 330 335			1008
aag gag cag ctg ctg cta ctt agg gag acg gac acg cgc atc atc atc Lys Glu Gln Leu Leu Leu Arg Glu Thr Asp Thr Arg Ile Ile Ile 340 345 350			1056
ggc agc ttc tcg cag gag ctg gcc ccc cag atc ctg tgc gag gcc tac Gly Ser Phe Ser Gln Glu Leu Ala Pro Gln Ile Leu Cys Glu Ala Tyr 355 360 365			1104
agg ctt cga atg ttc ggg gcg gac tac gcc tgg atc ctc cac gag agc Arg Leu Arg Met Phe Gly Ala Asp Tyr Ala Trp Ile Leu His Glu Ser 370 375 380			1152
atg ggg gct ccg tgg tgg ccg gac cag cgc acc gcc tgc tct aac cac Met Gly Ala Pro Trp Trp Pro Asp Gln Arg Thr Ala Cys Ser Asn His 385 390 395 400			1200
gaa ctg cag ctg gcc gtc gag aac ctc atc gtg gtc tca acg cac aac Glu Leu Gln Leu Ala Val Glu Asn Leu Ile Val Val Ser Thr His Asn 405 410 415			1248
agc atc gtt gga aat aac gtc agc tat agt gga ctg aac aat cac atg Ser Ile Val Gly Asn Asn Val Ser Tyr Ser Gly Leu Asn Asn His Met 420 425 430			1296

00777 "29652" 111700

ttc aac tcc cag ctg cgc aag caa tcc gcc cag ttc cac ggc cag gat	1344
Phe Asn Ser Gln Leu Arg Lys Gln Ser Ala Gln Phe His Gly Gln Asp	
435 440 445	
gga ttt ggc tcc ggt tat ggt ccc agg atc agt atc gct gca acg caa	1392
Gly Phe Gly Ser Gly Tyr Gly Pro Arg Ile Ser Ile Ala Ala Thr Gln	
450 455 460	
tct gac tct cgt cgg cgg agg aga agg ggc gtg gta ggc acc agc gga	1440
Ser Asp Ser Arg Arg Arg Arg Arg Gly Val Val Gly Thr Ser Gly	
465 470 475 480	
ggg cac ctc ttt ccg gag gcg atc tcg cag tac gcg ccg caa acc tac	1488
Gly His Leu Phe Pro Glu Ala Ile Ser Gln Tyr Ala Pro Gln Thr Tyr	
485 490 495	
gac gcc gtg tgg gcc atc gcc ctg gcc ttg aga gcc gct gag gag cac	1536
Asp Ala Val Trp Ala Ile Ala Leu Ala Leu Arg Ala Ala Glu Glu His	
500 505 510	
tgg cgg cgg aac gag gag cag tcg aag ctg gac gga ttc gat tac acc	1584
Trp Arg Arg Asn Glu Glu Gln Ser Lys Leu Asp Gly Phe Asp Tyr Thr	
515 520 525	
cgc agc gac atg gcc tgg gag ttc ctg cag caa atg ggc aag ctc cac	1632
Arg Ser Asp Met Ala Trp Glu Phe Leu Gln Gln Met Gly Lys Leu His	
530 535 540	
ttc ctg gga gtg tcg ggc ccc gtt tcc ttc agc ggc cca gat cgc gtt	1680
Phe Leu Gly Val Ser Gly Pro Val Ser Phe Ser Gly Pro Asp Arg Val	
545 550 555 560	
ggc acc act gcc ttc tat caa atc cag cgc ggt ttg ctg gaa ccg gtg	1728
Gly Thr Thr Ala Phe Tyr Gln Ile Gln Arg Gly Leu Leu Glu Pro Val	
565 570 575	
gcc ctc tac tat ccg gcc acg gat gcc ctg gac ttc ccg tgt ccc cgc	1776
Ala Leu Tyr Tyr Pro Ala Thr Asp Ala Leu Asp Phe Arg Cys Pro Arg	
580 585 590	
tgc cgg ccg gtg aag tgg cac agc ggg cag gta ccc atc gcc aag ccg	1824
Cys Arg Pro Val Lys Trp His Ser Gly Gln Val Pro Ile Ala Lys Arg	
595 600 605	
gtg ttc aag ctg cgg gtg gcg acc atc gct cca ctg gcc ttc tac acc	1872
Val Phe Lys Leu Arg Val Ala Thr Ile Ala Pro Leu Ala Phe Tyr Thr	
610 615 620	
atc gcc acc ctc tcc agc gtg gga atc gct ctg gcc atc acc ttc ctg	1920
Ile Ala Thr Leu Ser Ser Val Gly Ile Ala Leu Ala Ile Thr Phe Leu	
625 630 635 640	
gcg ttc aat ctg cac ttt cgg aag ctg aag gca att aaa ctt tcc agc	1968
Ala Phe Asn Leu His Phe Arg Lys Leu Lys Ala Ile Lys Leu Ser Ser	
645 650 655	

ccg aag ctg agc aac atc acc gca gtg ggc tgc atc ttt gtg tac gcc	2016
Pro Lys Leu Ser Asn Ile Thr Ala Val Gly Cys Ile Phe Val Tyr Ala	
660 665 670	
acc gtc atc ctt ttg ggc ttg gac cac tcg acg ctg ccc tcg gcg gag	2064
Thr Val Ile Leu Leu Gly Leu Asp His Ser Thr Leu Pro Ser Ala Glu	
675 680 685	
gac tct ttc gca acg gtc tgc acg gcc cgc gtc tat ctg ctc tcc gcc	2112
Asp Ser Phe Ala Thr Val Cys Thr Ala Arg Val Tyr Leu Leu Ser Ala	
690 695 700	
gga ttc tcg ttg gcc ttt gga tcg atg ttt gcc aag acc tac aga gtg	2160
Gly Phe Ser Leu Ala Phe Gly Ser Met Phe Ala Lys Thr Tyr Arg Val	
705 710 715 720	
cat cgg ata ttc act cgt acc ggc agc gtt ttc aag gac aag atg ctg	2208
His Arg Ile Phe Thr Arg Thr Gly Ser Val Phe Lys Asp Lys Met Leu	
725 730 735	
cag gac att caa ctg atc ttg ctc gtc ggc gga ttg ctt ctg gtg gat	2256
Gln Asp Ile Gln Leu Ile Leu Leu Val Gly Gly Leu Leu Leu Val Asp	
740 745 750	
gcg ctg ctc gta acc ctt tgg gtg gtc acc gat cca atg gag cgc cat	2304
Ala Leu Leu Val Thr Leu Trp Val Val Thr Asp Pro Met Glu Arg His	
755 760 765	
ctt cac aac ctg acg ctc gag atc agt gcg act gat aga agt gtc gtt	2352
Leu His Asn Leu Thr Leu Glu Ile Ser Ala Thr Asp Arg Ser Val Val	
770 775 780	
tac cag cct cag gtt gaa gtt tgc cgt tcg cag cac acg caa acg tgg	2400
Tyr Gln Pro Gln Val Glu Val Cys Arg Ser Gln His Thr Gln Thr Trp	
785 790 795 800	
ttg agt gtc ctg tac gcc tac aaa ggc ctt ctt ctt gtg gtg ggt gtc	2448
Leu Ser Val Leu Tyr Ala Tyr Lys Gly Leu Leu Leu Val Val Gly Val	
805 810 815	
tat atg gcc tgg gag acg cgc cac gta aaa ata cct gct ctc aat gac	2496
Tyr Met Ala Trp Glu Thr Arg His Val Lys Ile Pro Ala Leu Asn Asp	
820 825 830	
tcg cag tac atc gga gtg tct gta tac agt gtg gtc atc acc agc gcc	2544
Ser Gln Tyr Ile Gly Val Ser Val Tyr Ser Val Val Ile Thr Ser Ala	
835 840 845	
atc gtc gtg gtg ctg gcc aac ttg att tcg gag cga gtc acc ctg gcc	2592
Ile Val Val Val Leu Ala Asn Leu Ile Ser Glu Arg Val Thr Leu Ala	
850 855 860	
ttc atc aca atc aca gct ctg att tta acc agc acc act gca acc ctt	2640
Phe Ile Thr Ile Thr Ala Leu Ile Leu Thr Ser Thr Thr Ala Thr Leu	
865 870 875 880	
tgt ctg ctt ttc atc cca aaa ctc cat gat att tgg gca aga aac gat	2688

09715962 " 111700

Cys	Leu	Leu	Phe	Ile	Pro	Lys	Leu	His	Asp	Ile	Trp	Ala	Arg	Asn	Asp		
				885					890					895			
att	atc	gat	ccg	gtt	atc	cac	agt	atg	ggc	ctt	aag	atg	gag	tgc	aac	2736	
Ile	Ile	Asp	Pro	Val	Ile	His	Ser	Met	Gly	Leu	Lys	Met	Glu	Cys	Asn		
			900					905					910				
aca	cgc	cga	ttc	gtg	gtc	gat	gat	cgc	cga	gaa	ctg	cag	tat	cga	gtg	2784	
Thr	Arg	Arg	Phe	Val	Val	Asp	Asp	Arg	Arg	Glu	Leu	Gln	Tyr	Arg	Val		
			915				920					925					
gag	gtg	caa	aac	agg	gtc	tat	aag	aag	gaa	atc	cag	gct	ctg	gac	gcc	2832	
Glu	Val	Gln	Asn	Arg	Val	Tyr	Lys	Lys	Glu	Ile	Gln	Ala	Leu	Asp	Ala		
	930					935					940						
gag	att	cga	aag	ctg	gag	agg	cta	ctc	gag	tcg	gga	cta	acc	acc	acc	2880	
Glu	Ile	Arg	Lys	Leu	Glu	Arg	Leu	Leu	Glu	Ser	Gly	Leu	Thr	Thr	Thr		
	945				950					955					960		
tcc	acc	aca	act	tcg	tcg	tcc	aca	tca	ctc	tta	act	ggg	gga	ggt	cat	2928	
Ser	Thr	Thr	Thr	Ser	Ser	Ser	Thr	Ser	Leu	Leu	Thr	Gly	Gly	Gly	His		
				965					970					975			
cta	aag	cca	gaa	ctg	acg	gta	acc	agt	ggc	atc	tcg	cag	act	ccg	gct	2976	
Leu	Lys	Pro	Glu	Leu	Thr	Val	Thr	Ser	Gly	Ile	Ser	Gln	Thr	Pro	Ala		
			980					985					990				
gca	agt	aaa	aac	aga	act	cca	agt	atc	tcg	gga	ata	ctg	ccc	aat	ctc	3024	
Ala	Ser	Lys	Asn	Arg	Thr	Pro	Ser	Ile	Ser	Gly	Ile	Leu	Pro	Asn	Leu		
		995				1000					1005						
ctg	ctt	tcc	gtg	ctg	cct	cct	gtg	att	cca	cgg	gcc	agt	tgg	ccg	tca	3072	
Leu	Leu	Ser	Val	Leu	Pro	Pro	Val	Ile	Pro	Arg	Ala	Ser	Trp	Pro	Ser		
	1010				1015						1020						
gca	gag	tac	atg	cag	atc	ccg	atg	agg	cgt	tct	gtt	acc	ttt	gcc	tcc	3120	
Ala	Glu	Tyr	Met	Gln	Ile	Pro	Met	Arg	Arg	Ser	Val	Thr	Phe	Ala	Ser		
	1025			1030					1035					1040			
cag	ccc	caa	tta	gag	gag	gcc	tgc	ctg	cct	gca	cag	gac	ttg	att	aac	3168	
Gln	Pro	Gln	Leu	Glu	Glu	Ala	Cys	Leu	Pro	Ala	Gln	Asp	Leu	Ile	Asn		
			1045					1050					1055				
ctc	cgt	tta	gcc	cac	cag	cag	gcc	acg	gag	gct	aag	acg	ggc	ttg	ata	3216	
Leu	Arg	Leu	Ala	His	Gln	Gln	Ala	Thr	Glu	Ala	Lys	Thr	Gly	Leu	Ile		
			1060				1065						1070				
aac	cga	tta	cga	ggg	ata	ttt	tct	cgc	acc	act	tcg	agc	aac	aag	gga	3264	
Asn	Arg	Leu	Arg	Gly	Ile	Phe	Ser	Arg	Thr	Thr	Ser	Ser	Asn	Lys	Gly		
		1075					1080					1085					
tcc	acc	gcc	agc	ttg	gcg	gac	caa	aag	ggt	ctg	aag	gcg	gcc	ttt	aaa	3312	
Ser	Thr	Ala	Ser	Leu	Ala	Asp	Gln	Lys	Gly	Leu	Lys	Ala	Ala	Phe	Lys		
	1090				1095					1100							
tcg	cac	atg	gga	ctg	ttc	acc	cgc	ctg	att	ccc	tcc	tct	caa	acg	gcg	3360	
Ser	His	Met	Gly	Leu	Phe	Thr	Arg	Leu	Ile	Pro	Ser	Ser	Gln	Thr	Ala		

09715962 11700

1105	1110	1115	1120	
tcc tgc aat gcc ata tac aat aat cca aat cag gat tcc att ccc tca				3408
Ser Cys Asn Ala Ile Tyr Asn Asn Pro Asn Gln Asp Ser Ile Pro Ser				
1125		1130	1135	
gag gcg tcc tcc cac ccg aat ggt aac cac cta aag ccc atc cat agg				3456
Glu Ala Ser Ser His Pro Asn Gly Asn His Leu Lys Pro Ile His Arg				
1140		1145	1150	
ggt tca ttg acc aaa agc ggt act cac ctg gat cac ctt acc aag gat				3504
Gly Ser Leu Thr Lys Ser Gly Thr His Leu Asp His Leu Thr Lys Asp				
1155		1160	1165	
ccg aat ttc ctg cct atc ccc act att tct ggc ggt gaa cag ggg gac				3552
Pro Asn Phe Leu Pro Ile Pro Thr Ile Ser Gly Gly Glu Gln Gly Asp				
1170		1175	1180	
caa acg ttg ggt gga aag tat gtg aaa ctg ctg gag acc aag gtg aac				3600
Gln Thr Leu Gly Gly Lys Tyr Val Lys Leu Leu Glu Thr Lys Val Asn				
1185		1190	1195	1200
ttc caa ttg ccc agc aac cgg aga cct tcg gtg gtg cag cag cca ccc				3648
Phe Gln Leu Pro Ser Asn Arg Arg Pro Ser Val Val Gln Gln Pro Pro				
1205		1210	1215	
agt tta agg gaa agg gta agg ggt tcg cca cgc ttt cca cac cgc atc				3696
Ser Leu Arg Glu Arg Val Arg Gly Ser Pro Arg Phe Pro His Arg Ile				
1220		1225	1230	
ctg ccg ccc act tgc agt ctc agc gcc ctg gcc gaa tcc gag gac cgt				3744
Leu Pro Pro Thr Cys Ser Leu Ser Ala Leu Ala Glu Ser Glu Asp Arg				
1235		1240	1245	
ccc gga gat agc acc tct atc ttg ggc agc tgc aag tcc ata cct cgc				3792
Pro Gly Asp Ser Thr Ser Ile Leu Gly Ser Cys Lys Ser Ile Pro Arg				
1250		1255	1260	
att tcg ctg cag cag gtc acc agt gga ggc acc tgg aaa tcg atg gaa				3840
Ile Ser Leu Gln Gln Val Thr Ser Gly Gly Thr Trp Lys Ser Met Glu				
1265		1270	1275	1280
aca gtg ggc aag tcg agg ctt tcc ctc ggc gat tcc cag gaa gag gag				3888
Thr Val Gly Lys Ser Arg Leu Ser Leu Gly Asp Ser Gln Glu Glu Glu				
1285		1290	1295	
cag cag gcg cct gcg aat ggc acc gaa taa				3918
Gln Gln Ala Pro Ala Asn Gly Thr Glu				
1300		1305		

<210> 6

<211> 1305

<212> PRT

<213> Drosophila melanogaster

<400> 6

00715662-11700

Met	Arg	Ile	Ile	Gln	Pro	Val	Gln	Gly	Thr	Arg	Tyr	Gly	Pro	Trp	Pro	1	5	10	15
Ala	Val	Gly	Leu	Arg	Leu	Val	Leu	Ala	Leu	Ala	Trp	Ala	Thr	Ser	Ala	20	25	30	
Ala	Ala	Ala	Met	Glu	Ser	Ser	Ala	Glu	Leu	Gln	Ala	Leu	Gly	His	Glu	35	40	45	
Ala	Ile	Arg	Pro	Gly	Ala	Ala	Ser	Ile	Ser	Thr	Ser	Ser	Pro	Ser	Ser	50	55	60	
Ser	Pro	Pro	Gly	Glu	Ser	Ala	Ser	Thr	Val	Thr	Ala	Gly	Gly	Thr	Pro	65	70	75	80
Ile	Pro	Pro	Arg	Ser	Asp	Trp	Lys	Tyr	Lys	Arg	Thr	Lys	Val	Lys	Arg	85	90	95	
Arg	Gln	Gln	Arg	Leu	Asn	Ser	His	Ser	Asn	Leu	Pro	Gly	Ser	Thr	Asn	100	105	110	
Ala	Ser	His	Ala	His	His	Leu	Leu	Asn	Leu	Pro	Pro	Arg	Gln	Arg	Tyr	115	120	125	
Leu	Lys	Val	Asn	Gln	Val	Phe	Glu	Ser	Glu	Arg	Arg	Met	Ser	Pro	Ala	130	135	140	
Glu	Met	Gln	Arg	Asn	His	Gly	Lys	Ile	Val	Leu	Leu	Gly	Leu	Phe	Glu	145	150	155	160
Leu	Ser	Thr	Ser	Arg	Gly	Pro	Arg	Pro	Asp	Gly	Leu	Ser	Glu	Leu	Gly	165	170	175	
Ala	Ala	Thr	Met	Ala	Val	Glu	His	Ile	Asn	Arg	Lys	Arg	Leu	Leu	Pro	180	185	190	
Gly	Tyr	Thr	Leu	Glu	Leu	Val	Thr	Asn	Asp	Thr	Gln	Cys	Asp	Pro	Gly	195	200	205	
Val	Gly	Val	Asp	Arg	Phe	Phe	His	Ala	Ile	Tyr	Thr	Gln	Pro	Ser	Thr	210	215	220	
Arg	Met	Val	Met	Leu	Leu	Gly	Ser	Ala	Cys	Ser	Glu	Val	Thr	Glu	Ser	225	230	235	240
Leu	Ala	Lys	Val	Val	Pro	Tyr	Trp	Asn	Ile	Val	Gln	Val	Ser	Phe	Gly	245	250	255	
Ser	Thr	Ser	Pro	Ala	Leu	Ser	Asp	Arg	Arg	Glu	Phe	Pro	Tyr	Phe	Tyr	260	265	270	
Arg	Thr	Val	Ala	Pro	Asp	Ser	Ser	His	Asn	Pro	Ala	Arg	Ile	Ala	Phe	275	280	285	
Ile	Arg	Lys	Phe	Gly	Trp	Gly	Thr	Val	Thr	Thr	Phe	Ser	Gln	Asn	Glu	290	295	300	



09715962-111700

Glu	Val	His	Ser	Leu	Ala	Val	Asn	Asn	Leu	Val	Thr	Glu	Leu	Glu	Ala	305	310	315	320
Ala	Asn	Ile	Ser	Cys	Ala	Ala	Thr	Ile	Thr	Phe	Ala	Ala	Thr	Asp	Phe	325	330	335	
Lys	Glu	Gln	Leu	Leu	Leu	Leu	Arg	Glu	Thr	Asp	Thr	Arg	Ile	Ile	Ile	340	345	350	
Gly	Ser	Phe	Ser	Gln	Glu	Leu	Ala	Pro	Gln	Ile	Leu	Cys	Glu	Ala	Tyr	355	360	365	
Arg	Leu	Arg	Met	Phe	Gly	Ala	Asp	Tyr	Ala	Trp	Ile	Leu	His	Glu	Ser	370	375	380	
Met	Gly	Ala	Pro	Trp	Trp	Pro	Asp	Gln	Arg	Thr	Ala	Cys	Ser	Asn	His	385	390	395	400
Glu	Leu	Gln	Leu	Ala	Val	Glu	Asn	Leu	Ile	Val	Val	Ser	Thr	His	Asn	405	410	415	
Ser	Ile	Val	Gly	Asn	Asn	Val	Ser	Tyr	Ser	Gly	Leu	Asn	Asn	His	Met	420	425	430	
Phe	Asn	Ser	Gln	Leu	Arg	Lys	Gln	Ser	Ala	Gln	Phe	His	Gly	Gln	Asp	435	440	445	
Gly	Phe	Gly	Ser	Gly	Tyr	Gly	Pro	Arg	Ile	Ser	Ile	Ala	Ala	Thr	Gln	450	455	460	
Ser	Asp	Ser	Arg	Arg	Arg	Arg	Arg	Arg	Gly	Val	Val	Gly	Thr	Ser	Gly	465	470	475	480
Gly	His	Leu	Phe	Pro	Glu	Ala	Ile	Ser	Gln	Tyr	Ala	Pro	Gln	Thr	Tyr	485	490	495	
Asp	Ala	Val	Trp	Ala	Ile	Ala	Leu	Ala	Leu	Arg	Ala	Ala	Glu	Glu	His	500	505	510	
Trp	Arg	Arg	Asn	Glu	Glu	Gln	Ser	Lys	Leu	Asp	Gly	Phe	Asp	Tyr	Thr	515	520	525	
Arg	Ser	Asp	Met	Ala	Trp	Glu	Phe	Leu	Gln	Gln	Met	Gly	Lys	Leu	His	530	535	540	
Phe	Leu	Gly	Val	Ser	Gly	Pro	Val	Ser	Phe	Ser	Gly	Pro	Asp	Arg	Val	545	550	555	560
Gly	Thr	Thr	Ala	Phe	Tyr	Gln	Ile	Gln	Arg	Gly	Leu	Leu	Glu	Pro	Val	565	570	575	
Ala	Leu	Tyr	Tyr	Pro	Ala	Thr	Asp	Ala	Leu	Asp	Phe	Arg	Cys	Pro	Arg	580	585	590	
Cys	Arg	Pro	Val	Lys	Trp	His	Ser	Gly	Gln	Val	Pro	Ile	Ala	Lys	Arg	595	600	605	

Val	Phe	Lys	Leu	Arg	Val	Ala	Thr	Ile	Ala	Pro	Leu	Ala	Phe	Tyr	Thr	610	615	620
Ile	Ala	Thr	Leu	Ser	Ser	Val	Gly	Ile	Ala	Leu	Ala	Ile	Thr	Phe	Leu	625	630	635
Ala	Phe	Asn	Leu	His	Phe	Arg	Lys	Leu	Lys	Ala	Ile	Lys	Leu	Ser	Ser	645	650	655
Pro	Lys	Leu	Ser	Asn	Ile	Thr	Ala	Val	Gly	Cys	Ile	Phe	Val	Tyr	Ala	660	665	670
Thr	Val	Ile	Leu	Leu	Gly	Leu	Asp	His	Ser	Thr	Leu	Pro	Ser	Ala	Glu	675	680	685
Asp	Ser	Phe	Ala	Thr	Val	Cys	Thr	Ala	Arg	Val	Tyr	Leu	Leu	Ser	Ala	690	695	700
Gly	Phe	Ser	Leu	Ala	Phe	Gly	Ser	Met	Phe	Ala	Lys	Thr	Tyr	Arg	Val	705	710	715
His	Arg	Ile	Phe	Thr	Arg	Thr	Gly	Ser	Val	Phe	Lys	Asp	Lys	Met	Leu	725	730	735
Gln	Asp	Ile	Gln	Leu	Ile	Leu	Leu	Val	Gly	Gly	Leu	Leu	Leu	Val	Asp	740	745	750
Ala	Leu	Leu	Val	Thr	Leu	Trp	Val	Val	Thr	Asp	Pro	Met	Glu	Arg	His	755	760	765
Leu	His	Asn	Leu	Thr	Leu	Glu	Ile	Ser	Ala	Thr	Asp	Arg	Ser	Val	Val	770	775	780
Tyr	Gln	Pro	Gln	Val	Glu	Val	Cys	Arg	Ser	Gln	His	Thr	Gln	Thr	Trp	785	790	795
Leu	Ser	Val	Leu	Tyr	Ala	Tyr	Lys	Gly	Leu	Leu	Leu	Val	Val	Gly	Val	805	810	815
Tyr	Met	Ala	Trp	Glu	Thr	Arg	His	Val	Lys	Ile	Pro	Ala	Leu	Asn	Asp	820	825	830
Ser	Gln	Tyr	Ile	Gly	Val	Ser	Val	Tyr	Ser	Val	Val	Ile	Thr	Ser	Ala	835	840	845
Ile	Val	Val	Val	Leu	Ala	Asn	Leu	Ile	Ser	Glu	Arg	Val	Thr	Leu	Ala	850	855	860
Phe	Ile	Thr	Ile	Thr	Ala	Leu	Ile	Leu	Thr	Ser	Thr	Thr	Ala	Thr	Leu	865	870	875
Cys	Leu	Leu	Phe	Ile	Pro	Lys	Leu	His	Asp	Ile	Trp	Ala	Arg	Asn	Asp	885	890	895
Ile	Ile	Asp	Pro	Val	Ile	His	Ser	Met	Gly	Leu	Lys	Met	Glu	Cys	Asn	900	905	910

09715962-111700

Thr Arg Arg Phe Val Val Asp Asp Arg Arg Glu Leu Gln Tyr Arg Val  
 915 920 925  
 Glu Val Gln Asn Arg Val Tyr Lys Lys Glu Ile Gln Ala Leu Asp Ala  
 930 935 940  
 Glu Ile Arg Lys Leu Glu Arg Leu Leu Glu Ser Gly Leu Thr Thr Thr  
 945 950 955 960  
 Ser Thr Thr Thr Ser Ser Ser Thr Ser Leu Leu Thr Gly Gly Gly His  
 965 970 975  
 Leu Lys Pro Glu Leu Thr Val Thr Ser Gly Ile Ser Gln Thr Pro Ala  
 980 985 990  
 Ala Ser Lys Asn Arg Thr Pro Ser Ile Ser Gly Ile Leu Pro Asn Leu  
 995 1000 1005  
 Leu Leu Ser Val Leu Pro Pro Val Ile Pro Arg Ala Ser Trp Pro Ser  
 1010 1015 1020  
 Ala Glu Tyr Met Gln Ile Pro Met Arg Arg Ser Val Thr Phe Ala Ser  
 1025 1030 1035 1040  
 Gln Pro Gln Leu Glu Glu Ala Cys Leu Pro Ala Gln Asp Leu Ile Asn  
 1045 1050 1055  
 Leu Arg Leu Ala His Gln Gln Ala Thr Glu Ala Lys Thr Gly Leu Ile  
 1060 1065 1070  
 Asn Arg Leu Arg Gly Ile Phe Ser Arg Thr Thr Ser Ser Asn Lys Gly  
 1075 1080 1085  
 Ser Thr Ala Ser Leu Ala Asp Gln Lys Gly Leu Lys Ala Ala Phe Lys  
 1090 1095 1100  
 Ser His Met Gly Leu Phe Thr Arg Leu Ile Pro Ser Ser Gln Thr Ala  
 1105 1110 1115 1120  
 Ser Cys Asn Ala Ile Tyr Asn Asn Pro Asn Gln Asp Ser Ile Pro Ser  
 1125 1130 1135  
 Glu Ala Ser Ser His Pro Asn Gly Asn His Leu Lys Pro Ile His Arg  
 1140 1145 1150  
 Gly Ser Leu Thr Lys Ser Gly Thr His Leu Asp His Leu Thr Lys Asp  
 1155 1160 1165  
 Pro Asn Phe Leu Pro Ile Pro Thr Ile Ser Gly Gly Glu Gln Gly Asp  
 1170 1175 1180  
 Gln Thr Leu Gly Gly Lys Tyr Val Lys Leu Leu Glu Thr Lys Val Asn  
 1185 1190 1195 1200  
 Phe Gln Leu Pro Ser Asn Arg Arg Pro Ser Val Val Gln Gln Pro Pro  
 1205 1210 1215

Ser Leu Arg Glu Arg Val Arg Gly Ser Pro Arg Phe Pro His Arg Ile  
1220 1225 1230

Leu Pro Pro Thr Cys Ser Leu Ser Ala Leu Ala Glu Ser Glu Asp Arg  
1235 1240 1245

Pro Gly Asp Ser Thr Ser Ile Leu Gly Ser Cys Lys Ser Ile Pro Arg  
1250 1255 1260

Ile Ser Leu Gln Gln Val Thr Ser Gly Gly Thr Trp Lys Ser Met Glu  
265 1270 1275 1280

Thr Val Gly Lys Ser Arg Leu Ser Leu Gly Asp Ser Gln Glu Glu Glu  
1285 1290 1295

Gln Gln Ala Pro Ala Asn Gly Thr Glu  
1300 1305

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